COD BY CLOSED REFLUX, COLORIMETRIC METHOD
SM 18th and 19th ED 5220 D **Page 1 of 1**

Facility Name:_____VELAP ID_____

Assessor Name:_____Analyst Name:_____Inspection Date_____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____ Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____					
Digester operated at 150 +/- 2 degree C?	5220D.2a 5220C.2c				
Was digestion solution prepared as 10.216 g $K_2CR_2O_7$ and 167 mL H_2SO_4 and 33.3 g $HgSO_4$ in 1000mL distilled water?	5220D.3a				
Were the potassium hydrogen phthalate (KHP) standards made by first crushing and drying to a constant weight at 120°C then dissolving it in DI water at a rate of 425 mg KHP in 1000 mL water?	5220D.3d 5220B.3g				
Were tubes caps washed with H2SO4 prior to first use?	5220D.4a 5220C.4				
Were samples placed on preheated digester for 2 hours?	5220D.4a 5220C.4				
Were cooled samples inverted several times and any suspended matter allowed to settle out of reaction vessels prior to measurement?	5220D.4b				
Were samples read at 600 nm?	5220D.4b				
Were at least five standards made from potassium hydrogen phthalate (KHP) solution and subjected to the same digestion as samples used for calibration?	5220D.4c				
Were new calibrations prepared for each new lot of tubes/ampules or when verification standard differs by ≥ 5% from the calibration curve?	5220D.4c				
Was COD calculation = (mg O_2 X 1000) / mL sample	5220D.5				
Notes/Comments:					